



Expectations of Medical Sciences' Collegians about Higher Education Programs

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Introduction: University is one of the institutions where a given society has at hand for progression and development. The most successful universities and institutes of higher education is those which seek to analyze, improve, and ensure the quality of their educational programs. Therefore, this study aimed to determine the expectations of the students of Zahedan University of Medical Sciences on higher education programs. **Methods:** This descriptive-analytical study was conducted on 326 students of Zahedan University of Medical Sciences in the academic year of 2017-18. The samples were selected using stratified random sampling technique. Student expectations of higher education programs (Moghimi and Ramazan, 2011) were used to collect the required data. The validity of the questionnaire was measured by a group of expert faculty members. Its reliability was also calculated using Cronbach's alpha coefficient ($r = 0.82$). The collected data were analyzed running SPSS software version 22 using descriptive and independent t tests and analysis of variance. A significance level of 0.5 was considered as well. **Results:** This study results showed that the mean age of students was 22.39 ± 2.44 years old among whom 224 and 102 students were male and female, respectively. The students' mean score from student expectations questionnaire was 78.85 ± 12.54 . **Conclusion:** Student expectations were optimal on higher education programs. It is suggested to consider educational programs to maintain and improve these expectations for university students.

INTRODUCTION

University is one of the institutions that a given society has for development and progression. Universities, on one hand, preserve and transfer the cultural heritage and values of society, and, on the other hand, respond to social needs for the acquisition, dissemination and development of knowledge and technology (1). This system takes on its own tasks and goals when it is desirable in terms of the quality of education (2). Quality is the most important issue on higher education system. The most successful universities and institutes of higher education are those that need to take into account, investigate, improve, and ensure the quality of education in achieving educational objectives and expectations. The quality of higher education is defined as the adaptation of existing status to each of the factors and pillars of the education system including input and output processes with educational standards, objectives, and general and partial expectations. This will be achieved through the establishment of an efficient educational evaluation system in each academic system (3-4). The problem of the quality of service is more likely to arise in organizations that do not focus on identifying and meeting the needs and expectations of customers (5). Medical education is also part of higher education system dealing with human life and the health of community depends on the

quality of education in these universities. In the meantime, nursing and midwifery affect the improvement of patients' health in various physical, mental, psychological, and social aspects and cause irreparable damage to the health of the community and academic credibility of university and graduate students if there are inappropriate or inadequate educational programs. In this regard, nursing and midwifery officials should identify the factors affecting the quantitative and qualitative improvement of education (6, 26-29). Different methods are used to measure quality in higher education. Some university researchers measured service quality using single-dimensional scales which were not suitable for measuring a multidimensional concept such as quality (7). Higher education system has two dimensions: quantitative and qualitative ones. The development of this system requires balanced growth, proportional and balanced development of both quantitative and qualitative dimensions in parallel. A quantitative expansion of higher education system alone, regardless of qualitative development, brings about consequences such as academic failure, scientific dependence, and brain drain, lack of entrepreneurship as well as lack of knowledge production (8). According to UNESCO, quality in higher education has a multi-dimensional concept that depends largely on the state of the environment (background), university system, mission, or the conditions and standards of the university field of study (9). The study of the history of evaluation suggests that several models have so far emerged in all the contexts, especially educational evaluation. The CIPP model is one of the most influential systematic models introduced by the Stufflebeam in the 1970s at the Education and Research Center of the University of Ohio, United States. This model is related to concepts that are rooted in objectives, tests, and empirical methods, and the process of

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determining and obtaining in which “evaluation is to provide descriptive and judicial information about the value and desirability of objectives, design, implementation, and results in order to guide decision-making, serving more needs to accountability and perception”. The prominent feature of the phenomena examined by this model is to serve logical decisions and to evaluate all stages of program creation (10). Parasurman et al. developed a multidimensional scale to measure the quality of service called SERVQUAL. This tool measures customer perceptions in five dimensions of service. These dimensions include: Tangible dimension (physical environment and conditions of the service environment, including facilities, equipment, staff and communication channels); reliability dimension (ability to perform service in a reliable manner); responsiveness dimension (willingness to cooperate and help the customer; assurance dimension (the competence and ability of the staff to inspire the customer's sense of trust and confidence; and empathy dimension (a special deal with each customer, according to their spirits so that customers are convinced that their organization has understood them. The quality defined as the difference between customer expectations of the desired situation and their perceptions of the status of the provision of services (11). Evaluation of service quality is important in this regard, which is one of the essential steps in developing quality improvement programs (12). Accordingly, today, quality is defined by the customer or the recipient of services, and their perceptions and expectations are the main determining factor for quality (13). Despite the great efforts of higher education system to meet the needs of their clients, studies show that there is a gap between students' expectations and perceptions about the quality of educational services, and that higher education institutions have failed to meet students' expectations, which reduces students' motivation and dissatisfaction (14 and 15). In so doing, this study was conducted to evaluate the students' expectations of higher education programs at Zahedan University of Medical Sciences.

MATERIALS AND METHODS

This research is a descriptive-analytical study. The study population included all students of Zahedan University of Medical Sciences. According to the study by Jafari Asl et al. (16), the sample size was calculated based on the following formula:

$$Z = 1/96, \sigma = 0/96, d = 0/095 \quad n = \frac{z^2_{1-\frac{\alpha}{2}} \sigma^2}{d^2} \sim 350$$

So the sample size calculated 350. A stratified sampling method was used to classify each faculty as a class, and the sample was selected from each class proportional to the population. The instrument for data collection was a two-part questionnaire of students' expectations of higher education programs by Moghimi and Ramazan (2011) (21 & 22) without modification. Validity was measured by a panel expert of faculty members. Its reliability was calculated by calculating Cronbach's alpha coefficient ($r = 0.82$). The questionnaire consisted of two parts: the first part (demographic characteristics, semester, and discipline, daily study, daily presence in the library, location, number of individual academic courses related to the field of study). The second section consisted of 20 items that were measured in five levels of very important (5), important (4), somewhat important (3), low important (2) and unimportant (1). The scores were between 20 and 100, and the higher the scores, the higher the satisfaction with university services. Subsequently, students were selected at the Zahedan University of Medical Sciences (of course, students who had been studying for more than one year at the university) to coordinate the relevant units. After this, the researcher first explained the objectives of the project and after

obtaining the oral consent of the individuals to participate in the study, the method of completing the questionnaire was explained for the research samples and then the questionnaire was distributed among them. If the person did not have enough time to complete the questionnaire, it was left to the respondent and later delivered to the researcher. Also, at the beginning of the questionnaire, the sentence was written: "Your cooperation in the meanwhile means your informed consent to participate in this research, as well as the information of this questionnaire is confidential and there is no danger to you". The number of completed and returned questionnaires was 326, which is less based on the number of samples calculated. The return rate for the questionnaire was 93.14. The collected questionnaires were coded and entered into SPSS software version 22. Descriptive statistics (frequency distribution table, charts, change of individual indexes and dispersion), and inferential statistics (independent t test and one-way analysis of variance or equivalent nonparametric variance) at 95% level of confidence were used running SPSS software version 22. A significant level of 5% was considered.

Ethical Considerations

The researchers said the students that participation in this research is voluntary, anonymous and without any incentives to participate in the study. Students were informed about research objectives, questionnaire completion procedures and the possibility to withdraw from the research at any stage without any consequences. The researchers acknowledged students who participated in this research at the end of research. Also the researchers said to subjects to give their emails to receive the results of research. This project was approved by the Committee for Student Research affiliated to Zahedan University of Medical Sciences with the code number of 8284 and approved by the University's Ethics Committee with the code number of IR.ZAUMS.REC.1396.50.

RESULTS

According to the results, the mean age of the students was 22.39 ± 2.44 years old. The highest age was 38 and the lowest was 19 years old. In terms of the gender, 224 students (68.7%) were males and 102 ones (31.3%) were females.

In terms of daily study, 101 students (31%) stated that they were studying one hour a day, 153 ones (46.9%) stated that they would study between two and three hours one day and 61 students (18.7%) stated that they would study less than half an hour. In terms of residence, 294 ones (90.2%) were residents of the dormitory and 24 ones (7.4%) were non-dormitory students. 197 students (60.4%) stated that they had less than 5 books related to their field of study, while 85 ones (26.1%) had 6 to 12 volumes and 33 ones (10.1%) had more than 12 volumes. According to the findings, the mean score of student expectations of higher education program at Zahedan University of Medical Sciences was 78.85 ± 12.54 out of 100 points (Table 1).

Table 1 the mean Score and SD of student expectations of higher education program at Zahedan University of Medical Sciences

Course	Mean	No.	S.D
Medicine	78.47	119	11.78
Nursing-Midwifery	81.81	81	11.89
Paramedics	77.57	38	14.89
Dentistry	67.45	11	9.69
Rehabilitation	74.40	10	11.43
Health	77.44	25	13.92

Table 2 Expectations of students from Higher education programs (Questionnaire)

No.	Items	Score
1	Have a library with sufficient resources to meet students' learning demands	(89.3%)
2	Having adequate equipment related to the professional practice	(83.1%)
3	Provides useful feedback to students from evaluating their work to help improve their efforts	(76.1%)
4	Development of higher level standards in the field of professional practice	
5	Having informed employees with friendly behavior	
6	Having professors with a comprehensive knowledge of their topics	
7	Leadership and guidance of students to hire as an expert	
8	Have the professors who know how to teach students / help them how to learn	
9	Develop sufficient readiness in students for test (exams)	
10	Provide enough information about the curriculum to future students	
11	Encouraging students to be an independent learner, identifying their strengths and weaknesses, and being responsive to their learning	
12	Provide topics for students in the field of study to survey and research	
13	Applying Students with High Competence and Recruitment Requirements	
14	To have staff discussing attendance in lectures and private lessons with students	
15	Investigating attendance at lectures, specialized and practical courses	
16	Value for work experience and previous learning in employment	
17	Lesser guidance is provided by the professors to students who are not able to work on their own lessons	
18	Encourage academic achievement by students	(59.2%)
19	The ability to guide students to hiring in a field other than their specialized profession	(58.3%)
20	Putting the final assessment as the basis of the test	(56.1%)

The most frequent favorable (89.3%) viewpoint is related to issue number 1 (having a library with sufficient resources to meet student's learning demands), and the lowest frequency of favorable views (56.1%) was related to item 20 (giving the final assessment as the basis of the test), after which the 2nd and 3rd items had the highest frequencies i.e. 83.1% and 76.1%, respectively, while the 19th and 17th items had the lowest frequencies i.e. of 58.3% and 59.2%, respectively (Table 2).

Based on the one-way ANOVA test on the relationship between the field of study and student expectations of higher education program at Zahedan University of Medical Sciences, Also, it was observed that the students of the Zahedan Nursing and Midwifery faculty had the highest satisfaction with higher education programs (81.81 ± 11.89). The students of dentistry had the lowest satisfaction (67.45 ± 9.69) too. There was also a significant relationship between field of study and student expectations of higher education program at Zahedan University of Medical Sciences ($P = 0.008$ and $F = 3.197$).

Based on independent T-test on the relationship between gender and student expectations of higher education program at Zahedan University of Medical Sciences, male students scored 78.77 ± 12.51 and female students had a score of 79.17 ± 12.65 and the rate of satisfaction of female students from higher education programs was slightly higher than that of male students, but this difference was not statistically significant ($p = 0.760$). Also, based on independent t-test on the relationship between being dormitory resident and student expectations of higher education program at Zahedan University of Medical Sciences, it was found that the score of dormitory students was 77.94 ± 12.46 and the non-dormitory students score was 86.68 ± 10.42 . This difference in the higher satisfaction of non-dormitory students than dormitory students with higher education programs was significant ($p = 0.002$).

DISCUSSION

In this research, student expectations of higher education programs at Zahedan University of Medical Sciences were studied so as to investigate the factors that affect the students' expectations of higher education services. Having a good attitude towards higher education at university level means that the training and evaluation programs are in

line with the desirable routine and that no one, as much as students, can make an appropriate assessment of this process; therefore, knowing the students' view of higher education and its relationship with factors such as field of study, gender, and residence in a dormitory will clarify the policies for improving the level of education at the university level.

According to the present study, there was a significant relationship between the field of study and the satisfaction of higher education programs in which the most satisfaction was expressed by the students of the Faculty of Nursing and Midwifery; whereas, the least satisfaction was reported by the students of the Faculty of Dentistry. Safari et al. (17), in their study in 2013, to determine students' satisfaction with educational programs and processes of the Lorestan University of Medical Sciences, stated that there was a significant difference between the total satisfaction of educational processes based on the field of study ($p = 0.022$) which is consistent with our research.

There was no significant relationship between gender and satisfaction with higher education programs in our research, and both sexes expressed the same level of relative satisfaction. Rasoul Abadi et al. (18) showed a significant relationship between gender and quality of educational services in their study in Kurdistan in 2013 ($p < 0.001$); however, Ghalavandi et al. (12) in Urmia in 2012 had a different result in their study. In their research in Hamedan in 2011, Hosseinzadeh et al. (19) also concluded that there was no significant relationship between satisfaction with education and gender. Significant results were also obtained about the relationship between students' residency and satisfaction with higher education programs. The satisfaction rate of non-dormitory students was significantly higher than the satisfaction of dormitory students. Safari et al (18) had an inconsistent result in their research and did not find any significant difference between the satisfaction score of dormitory and non-dormitory students. The findings of this study showed that the quality of training services was excellent and in accordance with student expectations. In this regard, the quality of service provided was inappropriate in the study by Jafari Asl et al. (2014), based on the SERVQUAL model (16). Other research findings, including Aghamolaie et al. at Hormozgan University of Medical Sciences (7) and Tofighi et al. at Tehran University of Medical Sciences

(20) also showed that the services provided by universities are not a response to the needs of students and should be revised to improve these services. The desirability of a general view of students towards higher education means meeting their relative expectations in this regard, but it is more important than maintaining this desirable view that it is one of the most important tasks of the university's educational staff. It is necessary to maintain this level of satisfaction with higher education programs at a desirable and high level, with regular surveys of students and applying comments and suggestions to them, as appropriate, in order to create better performance in university students with a stronger academic power as they are not far off for the health and medical care of the years ahead.

CONCLUSION

In order to maintain and improve the level of student expectations of higher education programs, arrangements should be made for conducting educational and counseling courses at universities and dormitories. The Quality of Educational services has been a matter of major concern to the educators. The education quality indicator is used as an assessment measure all over the world in this respect (23). Psychologists and educational experts have always considered learning and academic success and their effective factors. In recent years, they attempt to identify the variables, by help of which they can promote academic success (24). It is recommended to improve the satisfaction of students at the Faculty of Dentistry and other colleges where the students have expressed a lower level of satisfaction. Student delegations from these colleges have meetings with members of the educational community to identify and resolve students' satisfaction with higher education through discussion between them and students. It is also suggested that this study be done by census method at university level, and the student's view of higher education be compared with the viewpoints of professors on this subject.

REFERENCES

1. Fitzpatrick JL, Sanders JR, Worthen BR. Program evaluation: Alternative approaches and practical guidelines. 2004.
2. Pakarian S. Investigating of increasing educational quality in university of Isfahan and suggestions for improving them, [Dissertation]. University of Isfahan. Faculty of Educational Sciences and Psychology: 1990. [In Persian]
3. Mohammad Zadeh Z. Developing indicators of training programs graduate courses (MSc-PhD) based on input patterns, processes and outputs of the Department of Health [MSc Thesis]. Isfahan: Research Assistant Medical Education Research Center, Isfahan University of Medical Sciences. 2003.
4. Yarmohammadian M. Quality in Higher Education, Encyclopedia of Higher Education, Ministry of Science, Research, and Technology, Tehran, Iran. 2004.
5. Ghobadian A, Speller S, Jones M. Service quality: concepts and models. *International journal of quality & reliability management*. 1994; 11(9):43-66.
6. Parto S, Chehrzad M M, Asgari F, Kazemnezhad Leili E. Educational status and related factors of students of Shahid Beheshti Nursing and Midwifery School [dissertation]. Shahid Beheshti Nursing and Midwifery School; 2012.
7. Aghamolaei T, Zare S, Abedini S. The quality gap of educational services from the point of view of students in Hormozgan University of Medical Sciences. *Strides in development of medical education. Journal of Medical Education Development Center* 2006; 3 (2): 78-85.
8. Ashrafi B., Rajabi A.A. A New Approach to Quality Assurance in Higher Education. Proceedings of the fifty-first meeting of the deans of universities and scientific and research centers. Tehran 2005: 1-27
9. Bazargan Abbas. Educational Evaluation (Concepts, Models, and Operational Process). Tehran, SAMT Publication, 2001: 68.
10. Eseryel D. Approaches to evaluation of training: Theory & practice. *Educational Technology & Society*. 2002; 5(2):93-8.
11. Stufflebeam, D.L., Folely, W.J., Gephart, W.J., Guba, E.G., Hammond R.L., Merriman, H.O., & Provus, M.M. Educational Evaluation and Decision-making. Itasca, IL: F.E. Peacock, 1971.
12. Parasuraman A, Zeithaml VA, Berry LL. SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality. *J Retailing*. 1998; 64(1):12-40.
13. Ghalavandi Hassan., Beheshtirad R, Ghale'ei A. Investigating the quality of educational services in the University of Urmia through SERVQUAL model. *Quarterly Journal of Management and Development Process*. 2012; 25(3):49-66
14. Kebraie A, Roudbari M, Rakhshani NM, Mirlotfi P. Assessing quality of educational services at Zahedan University of Medical Sciences. *Zahedan Journal of Research in Medical Sciences*, .2005;7(2):-139 146
15. Vaz A, Mansori S. Malaysian private education quality: Application of SERVQUAL model. *International Education Studies*. 2013; 6(4):164.
16. Emanuel R, Adams J. Assessing college student perceptions of instructor customer service via the Quality of Instructor Service to Students (QISS) Questionnaire. *Assessment & Evaluation in Higher Education*. 2006; 31(5):535-49.
17. Jafari Asl M, Chehrzed M, Ghanbari A. Quality of Educational Services from View Points of Nursing and Midwifery Students of Guilan University Based on Servqual Model. *Research in Medical Education*. 2014; 6(1):50-8.
18. Safari, M., Taherian, M., Amin Faghih, M., Yousefzadeh, A., Taha, P., Hamidi, Y., Hoseinzadeh, E., Farahani, A. Evaluation of students satisfaction from educational process and programs at Lorestan university of medical science. *Beyhagh*, 2015; 18(2): 30-38.
19. Rasoul Abadi M, Shafieian M , Gharibi FM . Assessment of the quality of educational services by the SERVQUAL Model: viewpoints of the students at Kurdistan University of Medical Sciences]. *Journal of Kurdistan University of Medical Sciences* 2013; 18 (1): 104 – 112.
20. Hoseinzadeh E, Hamidi Y, Roshanaie G, Cheraghi P, Taghavi M. Evaluation of student satisfaction from Hamadan University of medical sciences educational process and programs 2013; 11 (3) :37-44.
21. Tofighi SH, Sadeghifar J, Hamouzadeh P, Afshari S, Forouzanfar F, Tagahavi Shahri S. Quality of educational services from the viewpoints of students; SERVQUAL model]. *Iranian Quarterly of Education Strategies* 2011; 4(1): 21-26.
22. Hewitt F, Clayton M. Quality and complexity—lessons from English higher education. *International Journal of Quality & Reliability Management*. 1999; 16(9):838-58.
23. Moghimi SM., & Ramazan M., Educational Management, 2011; Tehran: Rahdraan Publication.
24. Farjad Sh., Barzegar N., Hosseiny H., The Assessment of the Educational Quality in E-citizenship Group of Tehran Technical Complex and Devising Optimization Strategies. *Procedia - Social and Behavioral Sciences* 29 (2011) 1924 – 1931.
25. AkbariLakeh M., Naderi A., Arbabisarjou A. Critical Thinking and Emotional Intelligence Skills and Relationship with Students' Academic achievement, *La Prensa Medica Argentina*, 2018; 104:2. Doi: 10.4172/0032-745X1000280.
26. Farhadi Fereshteh, Mostafaie Hadi, Taleschian-Tabrizi Negar, Hajebrahimi Sakineh, Madani Neda, Hajebrahimi Mohammadali, Parnianfard Neda, Abbaspour Morteza, Talebpour Amin, Pashazadeh Fariba. Evidence based medicine summer school for undergraduate medical students using innovative methods. *Medical Science*, 2018, 22(92), 377-384
27. Mohammad Ali Morowati Sharifabad, Mojtaba Fattahi Ardakani, Mohammad Amin Bahrami, Hossein Fallahzadeh.. Nurses' communication skills and the quality of inpatient services from patients' viewpoints. *Medical Science*, 2019, 23(96), 163-167

28. Farshad Mohammadi, Meimanat Hosseini, Mahsa Matbouei, Reyhaneh Sefidkar. The effect of educational intervention on the components of PRECEDE model in hypertension patients. *Medical Science*, 2018, 22(92), 390-396
29. Seyede Narjes Mousavizadeh, Jamileh Mohtashami. Correlation between professional autonomy and evidence-based practice in nurses. *Medical Science*, 2018, 22(94), 514-517

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Competing interests

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